

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 7

11201 Renner Boulevard Lenexa, Kansas 66219

SEP - 2 2014



## **MEMORANDUM**

SUBJECT: Screening Level Ecological Risk Assessment Work Plan

MRP Properties Company, LLC - Arkansas City, Kansas

RCRA EPA ID#: KSD087418695

FROM: Catherine Wooster-Brown

Ecological Risk Assessor

**ENSV/EAMB** 

**TO:** Brad Roberts

Project Manager AWMD/RCAP

As requested, we have reviewed the 2014 Screening Level Ecological Risk Assessment Work Plan for the MRP Properties Company located in Arkansas City, Kansas. If you have any questions or need further assistance, please contact me at #7425.

## **General Comments**

Overall the SLERA work plan looks very good. There are several references to upcoming investigative work plans for surface water, sediment, and soil. The U.S. Environmental Protection Agency R7 ecological risk assessors would appreciate the opportunity to review the work plans which will explain the details of sample collection specifically for the SLERA.

## **Specific Comments**

- 1. Sections 3.1.1 and 3.2.1 (p. 3-1 and 3-3). Section 3.1.1 states that historical data are not appropriate for the SLERA and therefore will not be used. Instead, results from the 2010 Exposure Unit Supplemental Soil Investigation for the Process Area, Junk Storage Area, and Construction Debris Landfill will be used to evaluate ecological exposures. Further, Section 3.2.1 states that additional soil sampling will be conducted to fill data gaps as described in the Soil Investigation Work Plan for the site (currently in preparation). The EPA ecological risk assessors would appreciate a further explanation of soil samples that will be used in the SLERA (a map), how the data gaps were determined, and the areas where the new soil samples will be collected. We would also appreciate the opportunity to review the Soil Investigation Work Plan for the MRP site that is currently in preparation to ensure that appropriate samples are being collected to adequately characterize potential ecological risks.
- **2. Sections 3.2.2 and 3.2.3 (p. 3-3 and 3-4).** The EPA R7 ecological risk assessors would appreciate the opportunity to review the upcoming Surface Water and Sediment Investigative Work Plan for the MRP Properties.





3. Section 4.1 (p. 4-1). Overall, the conceptual site model accurately describes contaminant transport, completed exposure pathways, and potentially impacted ecological receptors. However, the EPA ecological risk assessors disagree that ephemeral storm water retention ponds could not support aquatic invertebrates. As soon as puddles form, meiofauna (e.g., ostrocods, copepods, cladocerans) will begin to hatch. Meiofauna are predators and prey. The CSM needs to show the benthic invertebrate column as a complete exposure pathway for on-site surface water and on-site sediment. The EPA ecological risk assessors also find that the CSM needs to show benthic invertebrates as complete exposure pathways as prey items and all aquatic invertebrates would come into contact with off-site surface water.